In the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1. (Previously Presented) An emergency call processing system for mobile users, comprising:

a receiver, receiving emergency data calls from the mobile users through a data network, each of emergency data calls having a corresponding phone number; and

a queuing system, prioritizing incoming emergency data calls, and subsequently calling back by the corresponding phone number to each of the mobile users to address the emergency.

2. (Original) The emergency call processing system according to claim 1, the queuing system further comprising:

a first waiting buffer, storing incoming emergency data calls in a first-in-first-out (FIFO) manner;

a sorter, categorizing emergency data calls and prioritizing for each upon receipt from the first waiting buffer;

prioritized waiting buffers, receiving and storing emergency data calls from the sorter, wherein each prioritized waiting buffer is assigned to a different level of priority, and stores the emergency data calls with a corresponding level of priority; and

at least one processing unit, ~~receiving and processing the emergency data calls~~ calling back the mobile users from the prioritized waiting buffers according to their corresponding priority in a FIFO manner.

3. (Original) The emergency call processing system according to claim 2, wherein the processing unit is operated by either operator or automated system.

4. (Original) The emergency call processing system according to claim 1, wherein each of the emergency data calls carries caller phone number and a message reporting the emergency.

5. (Original) The emergency call processing system according to claim 4, wherein the message is selectively one of voice, image, text and combinations thereof.

6. (Original) The emergency call processing system according to claim 4, wherein each emergency data call further carries location information or personal information for the caller.

7. (Original) The emergency call processing system according to claim 1, wherein the emergency call center sends a confirmation message to each mobile user upon receipt of a corresponding emergency data call.

8. (Original) The emergency call processing system according to claim 7, wherein the confirmation message comprises registration identification assigned by the emergency call center.

9. (Original) The emergency call processing system according to claim 1, wherein mobile users submit emergency data call and replies to the emergency call center automatically using client software installed in user equipment.

10. (Original) The emergency call processing system according to claim 9, wherein the user equipment changes to automatic hand-shaking mode after receiving a confirmation message from the emergency call center.

11. (Original) The emergency call processing system according to claim 10, wherein the emergency call center solicits relevant information from mobile users in an alert message to the user equipment.

12. (Original) The emergency call processing system according to claim 11, wherein the alert message is sent via short message system (SMS).

13. (Original) The emergency call processing system according to claim 11, wherein the user equipment returns relevant information to the emergency call center automatically upon receipt of the alert message.

14. (Original) The emergency call processing system according to claim 13, wherein the user equipment also returns registration identification, provided beforehand by the emergency call center, with the relevant information.

15. (Original) The emergency call processing system according to claim 13, wherein the emergency call center utilizes an interleaving approach to periodically communicate with user equipment.

16. (Original) The emergency call processing system according to claim 11, wherein relevant information comprises location, caller's physical condition, current surrounding images, or combinations thereof.

17. (Previously presented) An emergency call processing method for mobile users, comprising the steps of:

receiving an emergency data call from an user equipment (UE), the emergency data call having a phone number;

prioritizing arrival emergency data calls; and

replying to the UE to confirm and calling back by the phone number to address the emergency.

18. (Cancelled)

19. (Previously presented) The emergency call processing method according to claim 17, further comprising:

storing the incoming emergency data calls in a first waiting buffer;

categorizing the emergency data calls;

determining and assigning a priority level for each emergency data call output from the first waiting buffer;

assigning different priority levels to prioritized waiting buffers;

storing each emergency data call in one of the prioritized waiting buffers according to the assigned priority level, wherein each prioritized waiting buffer operates in a first-in-first-out manner;

processing emergency data calls stored in the prioritized waiting buffers according to the priority level assigned to the prioritized waiting buffer.

20. (Original) The emergency call processing method according to claim 17, wherein the emergency data call carries caller phone number and a message reporting the emergency.

21. (Original) The emergency call processing method according to claim 20, wherein the message is selectively one of voice, image, text and combinations thereof.

22. (Original) The emergency call processing method according to claim 20, wherein each emergency data call further carries location information or personal information for the caller.

23. (Original) The emergency call processing method according to claim 17, further comprising sending a confirmation message to the UE upon receipt of the emergency data call.

24. (Original) The emergency call processing method according to claim 23, wherein the confirmation message comprises registration identification.

25. (Original) The emergency call processing method according to claim 24, further comprising the UE switching to automatic hand-shaking mode after receiving a confirmation message.

26. (Original) The emergency call processing method according to claim 25, further comprising soliciting relevant information in an alert message to the UE.

27. (Original) The emergency call processing method according to claim 26, wherein the alert message is sent through a short message system (SMS).

28. (Original) The emergency call processing method according to claim 26, further comprising upon receipt of the alert message, the UE returns requested information in an automatic way.

29. (Original) The emergency call processing method according to claim 28, wherein the UE attaches registration identification to the relevant information for return.

30. (Original) The emergency call processing method according to claim 28, further comprising periodically communicating with the UE using an interleaving approach.

31. (Original) The emergency call processing method according to claim 26, wherein relevant information comprises location, caller's physical condition, current surrounding images, or combinations thereof.